

CLAIMS

1. (Previously Presented) A method for reducing image noise in a scanned image, comprising:
 - decreasing a color level of the scanned image by reducing a number of bits of a full color level of one or more pixels in the scanned image to form a reduced color level image;
 - composing a pattern having less color level than the full color level; and
 - recombining the full color level of the one or more pixels in the scanned image by combining the reduced color level image with the pattern.
2. (Currently Amended) The method ~~for reducing image noise~~ of claim 1, wherein the reduced color level image and the pattern are combined using a bit-enhanced ~~bit-enhanced~~ method.
3. (Currently Amended) The method ~~for reducing image noise~~ of claim 1, wherein combining the reduced color level image with the pattern restores the one or more pixels to include a same number of bits as before the color level was is decreased.
4. (Currently Amended) The method ~~for reducing image noise~~ of claim 1, wherein the pattern comprises a halftone pattern.
5. (Currently Amended) The method ~~for reducing image noise~~ of claim 1, wherein the number of bits reduced from the full color level is set to an image noise level.
6. (Currently amended) A method for reducing noise in an image, ~~wherein the image is composed of a plurality of pixels having a scale of bits~~, comprising:
 - reducing an image level of one or more pixels of the image by subtracting a number
 - plurality of bits of image data from each of the one or more pixels ~~of the scale of each pixel in the image~~; and

~~restoring the image level of the one or more pixels using recombining the scale of each pixel in the image, wherein recombining the scale of each pixel in the image comprises a halftone pattern comprising a matrix, wherein a number of rows and a number of columns of the matrix correspond to method, wherein a pattern composed by the halftone pattern method is a matrix pattern, and wherein the row and column numbers of the matrix pattern are dependent on the number of bits of image data subtracted from the one or more pixels reduced in the step of reducing a plurality of bits of the scale of each pixel in the image.~~

7. (Currently Amended) The method ~~for reducing image noise~~ of claim 1, wherein the color level of the pattern depends on the number of bits reduced from the full color level.

8. (Currently Amended) A method for reducing noise in an image, comprising:
reducing a full image level of one or more pixels in the image by decreasing a number of bits according to the image noise;
composing a halftone pattern with a reduced image level corresponding to the decreased number of bits; and
recombining ~~an~~ the image level of the one or more pixels in the image using the halftone pattern.

9. (Currently Amended) The method ~~for reducing noise~~ of claim 8, wherein a number of bits in the recombined image level is the same as a number of bits in the full image level.

10. (Currently Amended) The method ~~for reducing noise~~ of claim 8, wherein the halftone pattern comprises a matrix having a number of rows equal to the decreased number of bits.

11. (Currently Amended) The method ~~for reducing noise~~ of claim 10, wherein the matrix further comprises ~~has~~ a number of columns equal to the decreased number of bits.

12. (Currently Amended) The method ~~for reducing noise~~ of claim 8 further comprising displaying the image including the recombined image level on a computer monitor.

13. (Currently Amended) The method ~~for reducing noise~~ of claim 8, further comprising filling out missing codes of the one or more pixels of the image using a bit-enhanced ~~bit-enhance~~ method.

14 – 17. Cancelled

18. (Currently Amended) An apparatus for reducing noise in an image, comprising:
means for reducing a full image level of one or more pixels in the image by decreasing a number of bits according to the image noise;

means for composing a halftone pattern with a reduced image level corresponding to the decreased number of bits; and

means for recombining an ~~the~~ image level of the one or more pixels in the image using the halftone pattern.

19. (Previously Presented) The apparatus of claim 18, wherein a number of bits in the recombined image level is the same as a number of bits in the full image level.

20. (Previously Presented) The apparatus of claim 18, wherein the halftone pattern comprises a matrix having a number of rows and columns equal to the decreased number of bits.

21. (Currently Amended) The apparatus of claim 18, wherein recombining the image level restores the one or more pixels to include a same number of bits as before the full image level was is reduced.

22. (Currently Amended) The apparatus of claim 18, wherein the number of bits decreased from the full image level is set to an ~~the~~ image noise level.

23. (Previously Presented) The apparatus of claim 18, wherein the reduced image level of the pattern depends on the number of bits reduced from the full image level.

24. (Currently Amended) The apparatus of claim 18, wherein one or more of the full image level, the reduced image level, and the image level ~~comprise~~ comprises a color level.

25. (New) The apparatus of claim 18, wherein one or more of the full image level, the reduced image level, and the image level comprise a gray level.